**REMARKS:** 

Claims 1-7, 9-16, 18-25, and 27-30 are currently pending in the subject Application.

Claims 8, 17, and 26 have been previously canceled without *prejudice*.

Claims 1-7, 9-16, 18-25, and 27-30 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent

No. 6,219,649 to Jameson (hereinafter "Jameson") in view of U.S. Patent Publication No.

20020049759 to Christensen (hereinafter "Christensen").

Applicants respectfully submit that all of Applicants arguments and amendments are

without prejudice or disclaimer. In addition, Applicants have merely discussed example

distinctions from the cited prior art. Other distinctions may exist, and as such, Applicants reserve

the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate.

Applicants further respectfully submit that by not responding to additional statements made by the

Examiner, Applicants do not acquiesce to the Examiner's additional statements. The example

distinctions discussed by Applicants are considered sufficient to overcome the Examiner's

rejections. In addition, Applicants reserve the right to pursue broader claims in this Application or

through a continuation patent application. No new matter has been added.

I. Support for Current Claim Amendments

While Applicants respectfully submit that Applicants' claims in their prior, unamended form

are not rendered obvious by the proposed combination of Jameson and Christenson, in an effort to

further prosecution and issuance of the Subject Application, Applicants currently submit

amendments to the claims. Thus, in compliance with 35 U.S.C. § 112, Applicants respectfully

submit that support for Applicants' current claim amendments may be found in at least at page 2,

lines 8-11 of Applicants' specification as filed, provided below, for the Examiner's convenience:

Service level planning is a method used to compute safety stock limits and ordering policies for items, based on customer service levels for the items and their

future demand. (Emphasis added).

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## II. Rejections Under 35 U.S.C. § 103(a)

Claims 1-7, 9-16, 18-25, and 27-30 stand rejected under 35 U.S.C. § 103(a) over *Jameson* in view of *Christensen*.

In rejecting Claim 1, the Examiner states the following:

Jameson teaches a computer-implemented method for solving a supply chain planning problem (see abstract; where a resource allocation optimization method is disclosed. A resource allocation method is a supply chain planning problem.)

(26 January 2010 Final Office Action, page 6). Applicants respectfully disagree with the Examiner's above assertions and respectfully direct the Examiner's attention to the abstract and column 6, lines 46-61 of *Jameson*, provided below, on which the Examiner relies:

A method of allocating resources in the presence of uncertainty is presented. The method builds upon deterministic methods and initially creates and optimizes scenarios. The invention employs clustering, line-searching, statistical sampling, and unbiased approximation for optimization. Clustering is used to divide the allocation problem into simpler sub-problems, for which determining optimal allocations is simpler and faster. Optimal allocations for subproblems are used to define spaces for line-searches; line-searches are used for optimizing allocations over ever larger sub-problems. Sampling is used to develop Guiding Beacon Scenarios that are used for generating and evaluating allocations. Optimization is made considering both constraints, and positive and negative ramifications of constraint violations. Applications for capacity planning, organizational resource allocation, and financial optimization are presented.

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As an example of the first four items, a business might have a resource allocation plan that optimizes profits (monetary gain), and among other things fulfills the requirement (constraint) that contractual obligations be met. However, it may happen that fulfilling the contractual obligations becomes impossible. At this point, though the constraint is violated, it is irrelevant. What is relevant is how best to handle the contractual obligations: re-negotiating, performing restitution, fulfilling some of the obligations, etc. Whatever course is chosen, there follows an adverse impact on the business' profits. The more numerous and onerous the contractual obligations, the larger the adverse impact. However, this adverse impact is always less than infinity. There are always degrees of catastrophe: it is better to be short 10M resource units, rather than 20M; it is better to be insolvent by \$30M, rather than \$50M; etc. (Emphasis added).

As shown above, the portions of Jameson relied on by the Examiner fail to disclose a

"supply chain planning problem [that] further comprises computing at least one safety stock

limit for an item," as required by Claim 1, as amended. By contrast, the above-referenced

portions of Jameson, merely disclose, among other things, a method of allocating resources that

includes optimizing profits in compliance with contractual obligations. Thus, Applicants

respectfully submit that the portions of *Jameson* on which the Examiner relies fail to provide any

disclosure of a supply chain planning problem that requires computing at least one safety stock

limit for an item as there is no mention anywhere in Jameson, and certainly no mention in the

portions of Jameson cited by the Examiner, of computing a safety stock limit as required by

Claim 1, as amended. In fact, the reference as a whole does not provide any reference to nor

make any mention of a safety stock of any kind.

Applicants further respectfully submit that the mere generalized mention of an allocation

plan is insufficient to infer that a safety stock limit is calculated as explicitly required by Claim

1, as amended. Furthermore, the discussion in Jameson of how to best handle contractual

obligations is irrelevant to the Examiner's assertion that Jameson discloses a supply chain

planning problem.

Similarly, Christensen does not provide the missing teachings. Thus, Applicants

respectfully submit that Jameson and Christensen, whether taken individually or in combination,

fail to render Claim 1 obvious under 35 U.S.C. § 103. Accordingly, Applicants respectfully request

that the rejections under 35 U.S.C. § 103 be withdrawn.

III. The Office Action Fails to Properly Establish a Prima Facie case of Obviousness

**According to the UPSTO Examination Guidelines** 

Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* 

case of obviousness of Claims 1-7, 9-16, 18-25, and 27-30 over Jameson and Christensen, either

individually or in combination. In particular, the Office Action fails to establish a prima facie case

of obviousness based on the "Examination Guidelines for Determining Obviousness Under 35

U.S.C. § 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc." (the

"Guidelines").

Response to Final Office Action Attorney Docket No. 020431.0947 Serial No. 09/963,960 As reiterated by the Supreme Court in KSR International Co. v. Teleflex Inc. (KSR), the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in Graham v. John Deere Co. (383 U.S. 1, 148 USPQ 459 (1966)). Obviousness is a question of law based on underlying factual inquiries. These factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

(Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. (383 U.S. 17–18, 148 USPQ 467 (1966)). As stated by the Supreme Court in *KSR*, "While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls." (*KSR*, 550 U.S. at ,82 USPQ2d at 1391).

However, it is important to note that the Guidelines require that Office personnel "ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). In addition, the Guidelines remind Office personnel that the "factual findings made by Office personnel are the necessary underpinnings to establish obviousness." (id.). Further, "Office personnel must provide an explanation to support an obviousness rejection under 35 U.S.C. 103. (id.). In fact, "35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed" and "clearly setting forth findings of fact and the rationale(s) to support a rejection in an Office action leads to the prompt resolution of issues pertinent to patentability." (id.).

With respect to the subject Application, the Office Action has not shown the *factual findings necessary to establish obviousness* or even *an explanation to support the obviousness rejection* of Claims 1-7, 9-16, 18-25, and 27-30 based on the proposed combination of *Jameson* and *Christensen*, either individually or in combination. The Office Action merely states that:

The inventions of Jameson and Christensen pertain to the analogous arts of database information storage and retrieval. All the claimed elements were known in

the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, as Christensen does not teach away from or contradict Jameson, but rather, teaches a function that was not addressed. The claimed invention is merely a combination of old and well-known elements, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, as fig. 3 of Christensen shows how the database management system can be integrated with any client 28 computer.

(26 January 2010 Final Office Action, page 8). Applicants respectfully disagree and respectfully submit that the Examiner's conclusory statement is not sufficient to establish the factual findings necessary to establish obviousness and is not a sufficient explanation to support the obviousness rejection based on the proposed combination of Jameson and Christensen. Applicants respectfully request that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines, including the factual findings necessary to establish obviousness to "ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)).

The Guidelines further provide guidance to Office personnel in "determining the scope and content of the prior art" such as, for example, "Office personnel must first obtain a thorough understanding of the invention disclosed and claimed in the application." (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). The scope of the claimed invention must be clearly determined by giving the claims the "broadest reasonable interpretation consistent with the specification." (See Phillips v. AWH Corp., 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) and MPEP § 2111.). In addition, the Guidelines state that any "obviousness rejection should include, either explicitly or implicitly in view of the prior art applied, an indication of the level of ordinary skill." (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). With respect to the subject Application, the Office Action has not provided an indication of the level of ordinary skill. Applicants respectfully request that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines, including an indication of the level of ordinary skill, relied upon by the Examiner. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)).

The Guidelines still further provide that once the *Graham* factual inquiries are resolved, Office personnel must determine whether the claimed invention would have been obvious to one of ordinary skill in the art. (*Id.*). For example, the Guidelines state that *Office personnel must explain* 

why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art. (Id.). In addition, the Guidelines state that the proper analysis is whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts. (Id. and See 35 U.S.C. 103(a)).

With respect to the subject Application, the Office Action has not expressly resolved any of the *Graham* factual inquiries to determine whether Applicants invention would have been obvious to one of ordinary skill in the art. In addition, the Office Action fails to *explain whatsoever why the difference(s) between the proposed combination of Jameson* and *Christensen*, either individually or in combination and *Applicants claimed invention would have been obvious to one of ordinary skill in the art*. The Office Action merely states that "in order to increase the performance of the system, which is a goal of *Christensen*." (26 January 2010 Final Office Action, page 8). Applicants respectfully disagree and further respectfully request clarification as to how this statement *explains why the difference(s) between the proposed combination of Jameson, Christensen, and Applicants claimed invention would have been obvious to one of ordinary skill in the art. Applicants further respectfully submit that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).* 

The Guidelines yet further state that the "key to supporting any rejection under 35 U.S.C. 103 is the *clear articulation of the reason(s) why the claimed invention would have been obvious*." (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). In fact, the Supreme Court in *KSR* noted that "the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit." (id). The Court quoting *In re Kahn* (441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)), stated that ""[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." (KSR, 550 U.S. at \_\_, 82 USPQ2d at 1396). The Guidelines provide the following seven rationales:

- (A) Combining prior art elements according to known methods to yield predictable results:
- (B) Simple substitution of one known element for another to obtain predictable results;

- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) "Obvious to try"—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Applicants thank the Examiner for stating that rationale A has been used to provide a basis for the Examiner's obviousness rejections. (26 January 2010 Final Office Action, page 5). Applicants respectfully submit that the Office Action fails to provide any articulation, let alone, clear articulation of the reasons why Applicants claimed invention would have been obvious in light of the current claim amendments. For example, the Examiner has not adequately supported the selection and combination of Jameson and Christensen to render obvious Applicants claimed invention. As clearly shown above, the Examiner's unsupported conclusory statements do not adequately provide clear articulation of the reasons why Applicants' claimed invention would have been obvious. In addition, the Examiner's unsupported conclusory statement fails to meet any of the Guidelines' rationales to render obvious Applicants claimed invention. Thus, if the Examiner continues to maintain the obviousness rejection of Claims 1-7, 9-16, 18-25 and 27-30 based on the proposed combination of Jameson and Christensen, Applicants respectfully request that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines, including a statement as to how combining prior art elements according to known methods yield predictable results in light of Applicants' current claim amendments.

## IV. <u>Applicants' Claims are Patentable over the proposed Jameson-Christensen</u> Combination

Applicants respectfully submit that Claim 1 is considered patentably distinguishable over *Jameson* and *Christensen*. This being the case, Claims 9, 10, 18, 19, and 27 are also considered

patentably distinguishable over Jameson and Christensen, for at least the reasons discussed above in

connection with Claim 1.

Furthermore, with respect to dependent Claims 2-7, 11-16, 20-25, and 28-30: Claims 2-7

and 28 depend from Claim 1; Claims 11-16 and 29 depend from Claim 10; and Claims 20-25 and

30 depend from Claim 19. As mentioned above, each of Claims 1, 9, 10, 18, 19, and 27 are

considered patentably distinguishable over *Jameson* and *Christensen*. Thus, dependent Claims 2-7,

11-16, 20-25, and 28-30 are considered to be in condition for allowance for at least the reason of

depending from an allowable claim.

For at least the reasons set forth herein, Applicants respectfully submit that Claims 1-7, 9-

16, 18-25, and 27-30 are not rendered obvious by Jameson and Christensen. Applicants further

respectfully submit that Claims 1-7, 9-16, 18-25, and 27-30 are in condition for allowance. Thus,

Applicants respectfully request that the rejection of Claims 1-7, 9-16, 18-25, and 27-30 under 35

U.S.C. § 103(a) be reconsidered and that Claims 1-7, 9-16, 18-25, and 27-30 be allowed.

Response to Final Office Action Attorney Docket No. 020431.0947 Serial No. 09/963,960 Page 19 of 20 **CONCLUSION:** 

In view of the foregoing amendments and remarks, this application is considered to be in

condition for allowance, and early reconsideration and a Notice of Allowance are earnestly

solicited.

Although Applicants believe no fees are deemed to be necessary; the undersigned hereby

authorizes the Director to charge any additional fees which may be required, or credit any

overpayments, to Deposit Account No. 500777. If an extension of time is necessary for allowing

this Response to be timely filed, this document is to be construed as also constituting a Petition for

Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such

Petition for Extension of Time should be charged to **Deposit Account No. 500777**.

Please link this application to Customer No. 53184 so that its status may be checked via

the PAIR System.

Respectfully submitted,

26 March 2010

Date

/Steven J. Laureanti/signed

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